

Application No.: 09/515,896  
Request for Reconsideration dated December 9, 2004  
Response to the Office Action of August 9, 2004

### REMARKS

Claims 3, 7, 9, 11, 13, 15 and 16 remain pending in the present application. No amendments were made by the present response. Reconsideration of the claims is respectfully requested in view of the following discussion.

#### The Prior Art Rejections

Claims 3, 7, 9, 11, and 13 were rejected under 35 U.S.C. §103 over **Kato et al.** (USP 6,151,360) in view of **Fujiwara**. Claims 14 – 16 were rejected under 35 U.S.C. §103 over **Kato, Fujiwara**, and further in view of **Igarashi et al.** (USP 6,324,216). The Examiner alleged that **Fujiwara** discloses a variable GOP boundary that is decided based on the inter-frame variance between time-wise adjacent frames. The previous Office Action relied upon Figs. 25A to 25C of **Fujiwara** for this feature. Now the Office Action relies upon:

“the image rearrangement control circuit (2) determines the positions of I, P, and B pictures that are read out from frame memory (1) in an order designated by reference frame interval determining circuit (13)”

“the reference frame interval can be controlled with the interval being smaller than the number of frames of GOP, which means that the GOP boundary position is determined; see Fig. 14, note the order of input 0-7 frames is rearranged in order of coding I, B, P,B,P,P,P,P with the determined interval  $m=2$  and  $m=1$ ” and

“motion vector detecting circuit detects the inter-frame variance between time adjacent frames, current frame, and previous frame; the reference frame interval determining circuit (13 of Fig. 7) determines whether the prediction efficiency exceeds a prescribed threshold, see col. 14, lines 1-17.”

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However, such disclosures do not teach or suggest a GOP boundary position being decided based on the decision by the intra-frame coding mode decision means. As claimed, the GOP boundary positions (e.g., GOP size) *vary* based on when the inter-frame variance between timewise adjacent frames exceeds a predetermined value (and then the P frame intervals are decided based on the motion features between timewise adjacent frames *within* the GOP).

In particular, the discussion in the Office Action seems to assume that the reference frame interval *m* determined by the reference frame interval determining circuit 13 identifies the positions between two I pictures. This is incorrect. **Fujiwara** describes the reference frame interval *m* as an interval between an I picture and a next P picture, or an interval between a P picture and a next P picture, etc. as shown in Figs. 25A, 25C and 16. The reference frame interval *m* in **Fujiwara** is not described to include an interval between an I picture and a next I picture. Even when **Fujiwara** describes determining the appropriate reference frame interval, where the reference frame is an I picture, **Fujiwara** does not specifically determine the location of the *next* I picture. In particular, column 14, lines 26 – 27 state that the next I picture is “predetermined” to be the fifth frame (in the example for calculating the reference frame interval where the starting reference frame was an I picture). **Fujiwara** teaches no more than a predetermined or fixed GOP boundary. Therefore, **Fujiwara** does not specifically teach or suggest the *variable* GOP boundary position recited in claim 3, “deciding a GOP boundary position when the inter-frame variance (between timewise adjacent frames) exceeds a predetermined value” and “deciding a P frame interval ... based on the motion features between timewise adjacent frames.”

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If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact the undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees that may be due with respect to this paper to Deposit Account No. 50-2866.

Respectfully Submitted,

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